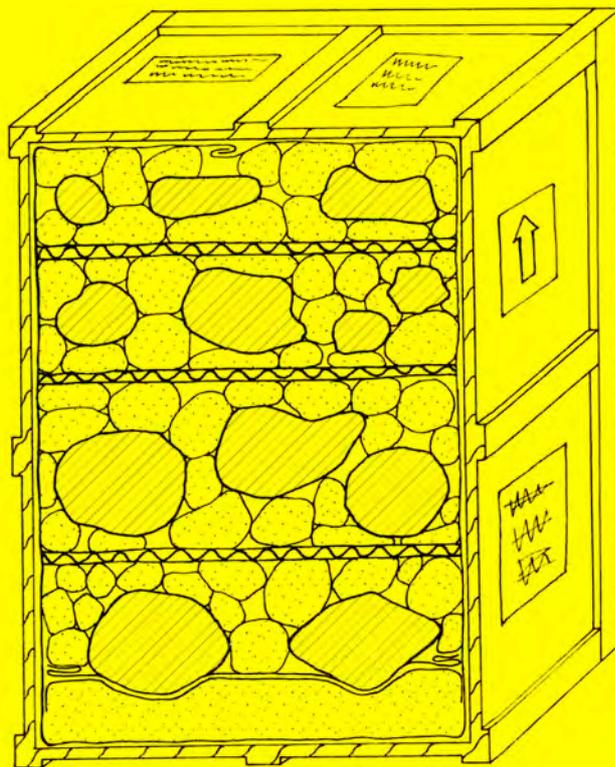


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THE BICYCLE AND THE MAILMAN

Fourteen years ago Paul Ensom, then Chairman of the Geological Curators' Group, wrote to me and told me that Peter Crowther, the Editor of *The Geological Curator* was stepping down. I knew what was coming next: would I take over as Editor? Although I knew that this would entail a lot of work, I really had no decent excuse to refuse, and so was installed at the next AGM.

Twenty-six issues later the time has come for me to pass on the role to Matthew Parkes. I know he will do a splendid job, and take the journal to greater heights.

Being your editor has been a pleasure (most of the time). I have been privileged to have been able to read your research in typescript form and to make it available to the GCG members. The Group owes its contributing authors a debt of gratitude for their research efforts.

Throughout my time as Editor I have continually asked members for research papers, notes, book reviews, really anything, which could be published in our journal. It has at times been a struggle to get copy of the journal. In 2006 I received only ONE paper for consideration for publication. As I lay down my green editorial pen I would ask all the members of the GCG to take up their pens and start writing again. Why do we as curators do less writing and collections research? I blame managers and those who want us to account for our whereabouts and time use. I may be wrong in pointing the finger, but there has been a trend leading to fewer submissions in recent years.

The digital age has brought advances in desk-top publishing, and in line with this the journal has poured from my computers. either at home or in work. Gone are the days of cutting and pasting copy, but it has come at a price, in that it is too easy to replicate text and publish incorrect text or grainy images. One paper appeared with the incorrect

abstract that had appeared in the previous issue, and the annual accounts were similarly replicated in two successive AGM reports. Subsequently the Treasurer failed to notice this, and only became aware of the problem when it was pointed out to him (perhaps I should have kept quiet!).

I am grateful to Simon Knell, John Nudds, and Stephen Donovan for their work as guest editors for issues 6(2), 7(6), 8(5) on fossil excavation, ethics and fossil collecting, and trace fossils in the museum respectively.

During my tenure *The Geological Curator* has been printed in Dublin, first by ColourBooks of Baldoyle and then by Betaprint of Bluebell. Both printers produced journals of an excellent quality at a most reasonable price. I thank all their staff and in particular Deirdre Dunne and Adrienne Foran my contacts in these companies. Matthew Parkes frequently acted as a proof reader and I hope that I can reciprocate.

Being Editor has not always been a bed of roses. Packing and mailing the issues twice a year has been a tedious part of the job, to say nothing of stapling the offprints together! My mail office in TCD has accepted without question numerous boxes of journals for mailing and I am most grateful to my institution for this support. One time it was suggested that I could enter a barter system whereby I traded my old Raleigh Roadster bicycle for mailing credits! I still have the bicycle and the journal was mailed in any case.

Finally I must thank my wife and two young daughters who have sometimes been roped into helping affix address labels to envelopes, and have wondered what it was all for.

Patrick Wyse Jackson

18th December 2006

A PLIOSAUR TRAVELS: THE PACKAGING OF A UNIQUE CRETACEOUS MARINE REPTILE, AND ITS TRANSPORT FROM COLOMBIA TO THE UNITED KINGDOM

by Leslie F. Noè, Rigoberto Gómez-Cruz, Marcela Gómez-Pérez and Pedro Patarroyo



Noè, L.F, Gómez-Cruz, R., Gómez-Pérez, M. and Patarroyo, P. 2006. A pliosaur travels: the packaging of a unique Cretaceous marine reptile, and its transport from Colombia to the United Kingdom. *The Geological Curator* 8(6): 271–280.

As a result of a collaborative research effort between the Universidad Nacional de Colombia and the Sedgwick Museum (UK) the acid prepared skull and rock encased postcranial skeleton of a new Cretaceous marine reptile (a pliosaur) has been transported from Bogotá to the University of Cambridge. This contribution details the procedure from agreeing the loan, planning the transport, obtaining the funds, through the challenge of paperwork, innovative packing and labelling, to planning and managing the media, and the successful arrival of the specimen.

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Introduction

Following twelve months of demanding negotiations, challenging paperwork and intense discussion regarding the most suitable method of packaging, two wooden crates containing a large South American Cretaceous marine vertebrate travelled across the Atlantic Ocean early in 2004. The transport of this scientifically important vertebrate fossil was the result of collaborative research in vertebrate palaeontology between the Universidad Nacional de Colombia (Bogotá, Colombia) and the Sedgwick Museum (University of Cambridge, United Kingdom). As all fossils are considered Colombian National Heritage, and because this was the first time the Universidad Nacional de Colombia had lent a large vertebrate fossil for preparation, research and study outside Colombia, all policies and regulations, modes of transport, documentation, and methods of packaging had to be considered. It was clear from the outset that this ambitious project would be an “odyssey” from the very beginning. The purpose of this contribution is therefore to bring to a wider audience the trials and tribulations of bringing a large vertebrate fossil from

South America to Europe, whilst adhering to all national and international regulations and laws, and ensuring this important specimen arrived in the U.K. in the best possible condition for detailed study.

The fossil

In 1967 a fossil was discovered by French hydrogeologists (‘Cooperación Técnica Francesa’), near the Santo Ecce Homo Convent, close to the village of Villa de Leyva, north-east of Bogotá, Colombia (Acosta-A. 1979). The bones were encased in a very large (> 3 metres in length) calcareous concretion and covered in bituminous shale. The specimen was initially donated to the Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá, but was later transferred to the palaeontological collections of the Departamento de Geociencias (UN-DG) where it remained in storage, and unstudied for more than 30 years (ETAYO-SERNA pers. comm. 1999). There are no records of the original fieldwork, or the date of, or reason for, the subsequent departmental transfer within the Universidad Nacional de Colombia.



Figure 1. The concretion containing the skull of UN-DG-R-1000 prior to preparation.



Figure 2. The acid prepared cranium of UN-DG-R-1000 viewed obliquely from the front; note the three-dimensional preservation.

In 1999 the fossil (registered as UN-DG-R-1000, formerly catalogued as UN-DG-R-287 *in errore*) was rediscovered. The specimen was in a number of blocks; presumably the original concretion had been broken up at the time of collection to aid recovery. Preliminary examination of the concretion indicated it contained a large vertebrate, including a skull, vertebral column, pectoral and pelvic girdles, ribs, and parts of two limbs (Figure 1), but its taxonomic affinities were unclear. The skull and anterior cervical vertebrae were selected for preparation, which was undertaken in the laboratories of the Museo Geológico José Royo y Gómez of INGEOMINAS (the Colombian Geological Survey), using standard mechanical and chemical techniques (Rutzky *et al.* 1994) modified to suit local conditions. During this work it became clear the animal was a pliosaur, a derived sauropterygian marine reptile.

Chemical preparation revealed an exceptionally well-preserved, wonderfully three-dimensional, and substantially complete skull (Figure 2), highlighting the importance of this exciting new specimen. UN-DG-R-1000 is a new genus and species of pliosaur and a full osteological description of the specimen will appear elsewhere. Extensive investigation, including new fieldwork at the original find site (Gómez Pérez 2001), indicated the specimen originated from the Lower Cretaceous (Barremian stage), Paja Formation (Etayo-Serna 1979), and can be dated at approximately 130 million years old (Gradstein *et al.* 2004). Barremian sauropterygian fossils are exceptionally rare worldwide (Persson 1963, Bardet 1995, Noè 2001); the new pliosaur is an important addition to global sauropterygian palaeontology, and an extremely valuable addition to the vertebrate palaeontological heritage of Colombia.

Preliminaries

The loan

Preliminary results from study of the new Colombian pliosaur were presented at the 50th Symposium of Vertebrate Palaeontology and Comparative Anatomy (SVPCA) held in Cambridge in September 2002. This led, in January 2003, to a research visit from the UK to establish links with the Colombian palaeontological community and see some of the rich vertebrate fossil fauna of Colombia. A series of vertebrate palaeontology seminars were presented in various academic institutions in Bogotá, which led to contact with Heads of Department, faculty members and interested students, as well as private collectors and members of the public. During this visit, the possibility of undertaking collaborative research on UN-DG-R-1000 was proposed, leading to a formal

loan request for the pliosaur from the Director of the Sedgwick Museum to the Head of the Departamento de Geociencias in the Universidad Nacional de Colombia.

Following exchange of correspondence, an outline cooperative agreement was made between the heads of department of the two universities; by the end of February, the conditions and length of the loan had been agreed and the responsibilities of each partner clarified. A formal loan document was issued in mid-March, which included the following points:

1. The loan period was to be three (3) years, with the possibility of extension by mutual agreement;
2. The Sedgwick Museum would guarantee the return of UN-DG-R-1000 according to the UNESCO (1970) and Unidroit (1995) conventions on the ownership of Cultural Heritage (see also Brodie *et al.* 2000);
3. All Colombian and U.K. laws and regulations relating to the export and import of fossils would be followed;
4. The Sedgwick Museum would pay the full return cost of the transport;
5. Preparation work was permitted, provided it was undertaken in the Sedgwick Museum's conservation and preparation facilities, but the specimen had to be left robust enough for safe return to, and display in, Colombia.

It was important that UN-DG-R-1000 was lent to an institution and not an individual researcher, to ensure return of the specimen, even if staff at the two institutions changed during the loan period. It was made clear that the Sedgwick Museum fully abided by all laws and regulations regarding the ownership of cultural heritage thereby ensuring return of the fossil. Although not part of the formal loan agreement, both sides recognised the importance of involving nationals of both countries at all stages of the project in order to share expertise, and transfer skills and knowledge in vertebrate palaeontological techniques between the institutions. This included an informal arrangement that all results would be published jointly between Colombian and U.K. colleagues, and that applications for funding for a PhD studentship to permit a suitably qualified Colombian student to study the fossil would be made. With the loan and other agreements in place, organisation of the transportation and packaging could begin, and the ongoing search for funds was given additional impetus.

Planning the transportation of the material

When the idea of transporting the pliosaur arose, there was no funding in place and there was no clear

understanding of the procedures that would need to be followed. Preliminary investigations indicated that there were no laws in Colombia explicitly relating to the export of palaeontological material for study, however there were laws covering all archaeological artefacts that could potentially relate to fossil finds. In addition there were two fundamental questions that needed to be answered in order to proceed: How could the pliosaur be transported? And how much would it cost? As the full cost of the project was not known, this caused problems for finding sources of funds. However, in order to obtain an estimate for the cost of transport we needed to know the weight of the fossil and the possible transport routes.

The fossil consisted of two distinct sets of elements: the acid prepared skull and anterior cervical vertebrae were delicate, needed careful packing but were relatively light; and the postcranial skeleton which was still encased in 24 blocks of rock, relatively robust, but heavy. The skull was weighed in its existing storage container and was around 30 kg. The postcranial blocks had to be weighed individually giving an estimated weight of 200 kg, without packaging. We considered the most suitable way to transport the fossil and decided that a direct flight from Bogotá to the UK would minimise possible complications caused by passing through several airports in different countries, reduce handling and the number of customs inspections required, and thereby decrease the potential for damage. We also considered sending the fragile skull by a different route from the postcrania, but ultimately decided to send the fossil in two crates, but as a single consignment. Initially we approached the international couriers FedEx and DHL who offered transport rates of 13.30 US dollars (USD) and 8.11 USD per kg respectively: the total price using these services would have been in the order of 2000-3000 USD. However we had concerns about the amount of handling, the routes offered and the price seemed relatively high. Therefore a number of other options for transporting the fossil were considered.

Advice was sought from a wide range of individuals and companies in order to find transport direct to the United Kingdom, and this included asking at the British Embassy in Bogotá. British Airways Cargo was consulted, and they offered a transport rate of 1.78 USD per kg including fuel, which would amount to around 450 USD. However, British Airways Cargo were unable to negotiate directly with us as individuals or with the Universidad Nacional de Colombia because of the export laws and regulations in Colombia, although they suggested the names of three government authorised cargo agencies (Panalpina, DHL-Danzas, and Kuehne-Nagel) that

could help. All three were contacted, but the most helpful, interested and speedy response was received from Panalpina who offered a service which included collection from the Universidad Nacional de Colombia in Bogotá, a direct flight to London, and delivery to Cambridge. Panalpina were also able to deal with all the relevant taxes and handling fees (to give an estimated total cost of around 1200 USD), and were able to advise on the paperwork required.

Having chosen the transport company, and with an idea of the cost of moving the fossil, the next task was to obtain the funding. Various avenues were pursued, and in April the “Friends of the Sedgwick Museum”, an organisation set up to support the work of the Museum, offered the possibility of funding for discrete research projects. A ‘redevelopment fair’ took place in mid-June with numerous projects proposed and the membership asked to vote on the schemes they considered most suitable for funding. The results were collated and the Friends committee made the final decision in late July, which included part funding (of approximately 1600 USD) towards the costs of packaging and transportation of the Colombia fossil. Additional funding was obtained by undertaking external consultancy work in the Sedgwick Museum Conservation Laboratory, and full funding was finally in place by August 2003. Meanwhile numerous applications for funding of the scientific work were completed and submitted.

The paper trail

In early September, and with the funding confirmed, the Sedgwick Museum contacted Panalpina who informed us where in Colombia all the required documents for the export of the fossil could be obtained; they also agreed to take care of all the necessary arrangements for transport from door-to-door between the Universities. They sent a checklist of the documents necessary for the transport to proceed:

1. A letter of agreement between the Universidad Nacional de Colombia and the Sedgwick Museum giving the originating and delivery addresses, a description of the items to be transported, the number of pieces the item consisted of, the insurance value in USD, the type of packaging, and the approximate weight;
2. The Universidad Nacional de Colombia official export codes required for airport clearance;
3. A letter for the ‘Dirección de Impuestos y Aduanas Nacionales’ (DIAN, the Colombian Customs) explaining the purpose of the export, indicating the commercial value of the shipment, the length of the loan, and an agreement that the fossil would be returned to

Colombia;

4. A letter to the airport police guaranteeing that no dangerous materials or illegal substances were to be exported.

In Colombia, much time was spent attempting to secure the necessary paperwork. Initially, defining scientific value in commercial terms was problematic, and it proved extremely difficult to obtain a number of the details required by the cargo company, such as the official Universidad Nacional de Colombia export codes. At this point Panalpina advised us that the Universidad Nacional de Colombia had an ‘Oficina de Comercio Exterior’, effectively a trading office, that deals with exports and imports. The Oficina de Comercio Exterior agreed to use their expertise to obtain the necessary paperwork, although they had never had to export a large vertebrate fossil before. By early October 2003 all the documents listed above, plus some additional letters required by the cargo company, had been obtained and an order for the shipment was sent from Cambridge. However, due to a lack of experience with transporting palaeontological material, and to ensure all legal requirements were being fulfilled, the Oficina de Comercio Exterior considered it necessary to consult a lawyer. It transpired that the legal advice indicated special permission was needed from the Instituto Colombiano de Antropología (ICAN), the body responsible for the protection of Colombian archaeological National Heritage. This proved problematic, as it was not clear if the laws relating to archaeological artefacts also covered fossilised remains; however, ICAN agreed that the fossil could legally be exported for study, providing return was guaranteed. In addition, Universidad Nacional de Colombia regulations required the approval of the Rector (the Head of the University), which due to his high workload, took a great deal of time to be approved and signed. These clarifications and permissions delayed the transport by a further two months, and meant that two of the earlier documents (for DIAN and the airport police) were now out of date and, once again, we had to wait for these to arrive; fortunately this took just three weeks. It was now the end of November 2003, and it had taken almost five months to amass all the necessary documents to allow the pliosaur to travel.

Press Release

Early in our negotiations we realised there was considerable potential for publicity regarding the transport of this exceptional fossil. At the same time it was realised that should an event of national or global significance occur on the day the pliosaur arrived, any idea of media coverage would be in vain.

Preparation of the press release was started as soon as it was clear the pliosaur would travel, which gave us plenty of time to prepare, as we wanted as many of the interested parties as possible to have the opportunity to comment on a draft. The press release was intended to do a number of things:

1. To inform the media that the animal was due to arrive;
2. To give some idea of what a pliosaur was (and if possible make it clear it was not a 'dinosaur');
3. To make it clear the specimen was on loan from Colombia, that the work was collaborative between the Colombian and UK institutions, and that future work would involve nationals from both countries;
4. To acknowledge all those who had helped.

In addition, the press release had to make the story appealing to editors and news desk staff, to conform to the University of Cambridge Press and Publications Office house style, and be acceptable to the Sedgwick Museum, the Department of Earth Sciences, the Universidad Nacional de Colombia, and the Friends of the Sedgwick Museum. Early versions of the press release were circulated within the Museum, before being sent out to all interested parties early in October. The draft was modified in the light of the comments received, and agreed with the University Press and Publicity Office. Final details, such as the date of arrival and who would be able to attend on the day the fossil was due to arrive, were left open as long as possible.

In addition to the press release, we decided a model of the pliosaur would assist the media visualise the animal. As this was a totally new genus and species of pliosaur, no existing model would be suitable. Draft drawings of the head of the new animal were prepared and one of the Friends of the Sedgwick Museum kindly agreed to construct a model. To our amazement and delight two models were produced, one of which one was a life sized representation of the head of the living animal, and the other a smaller version of the skull.

Packing

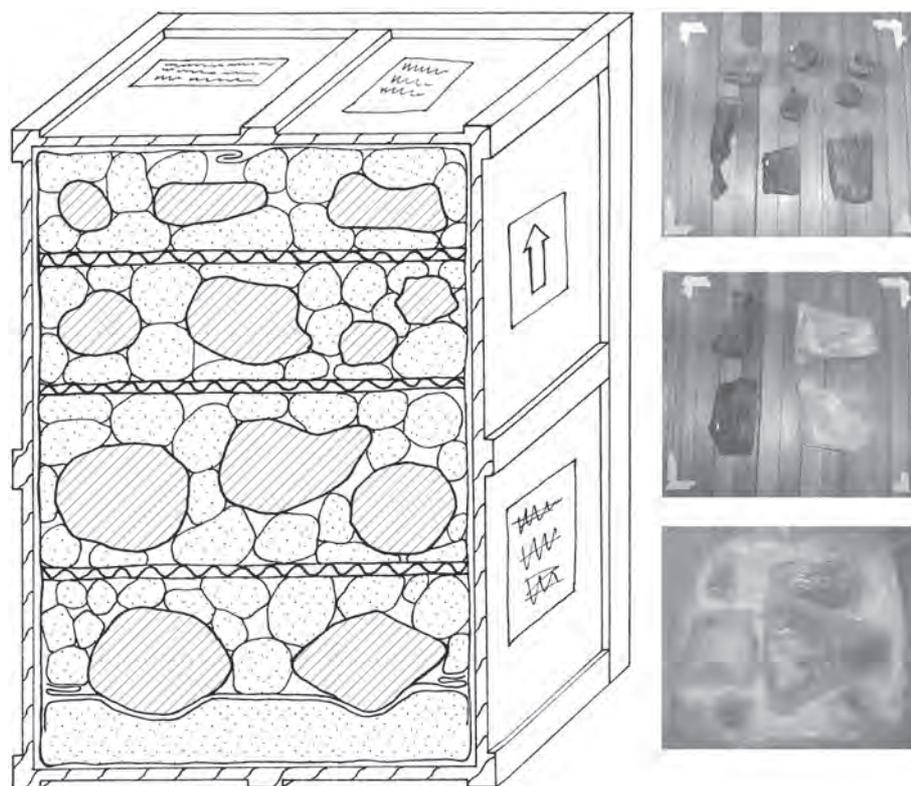
Between September and November, whilst the transport arrangements were being organised, considerable discussion took place to agree the best method of packing the pliosaur. The critical factor at all times was the safety of the specimen: it is exceptionally important and there had to be no damage during transit. This meant ensuring the packaging was robust enough to guarantee no movement or contact between the fossil elements (especially the delicate cranial material), but equally it must be

packed in such a way that the customs and police in Bogotá and London Airports could inspect it without difficulty. The fossil was assessed and possible damage considered: the most fragile elements were the acid prepared cranium, and early on it was decided to pack this separately from the rest of the rock-encased postcranial skeleton. However, it was also agreed that the most fragile parts of the specimen, such as the braincase elements, otic capsules and sclerotic plates (bones from within the eyes), would be carried by hand for safety.

Two timber crates were needed to transport the fossil: one crate already existed, which held the concretions containing the postcranial skeleton with internal dimensions (length: width: height) of 860 x 560 x 485 mm; and a new crate was constructed for the skull (internal dimensions 650 x 600 x 920 mm). In order to protect the skull, each bone was wrapped in three layers of bubble wrap, to act as a separator and shock absorber, and fixed with wide clear adhesive tape. One layer of bubble wrap was considered sufficient for the concretions, to protect the small pieces of bone visible within the matrix. Various options for packing the wrapped elements in the crates were considered, as plastazote and other museum grade materials commonly used in Europe were not available and importing such materials into Colombia would have led to considerable delays. Other solutions considered were: jacketing the specimen in plaster of Paris, using expanded polystyrene chips, or cutting up large sheets of flexible polyurethane foam. Plaster of Paris was rejected as it would have been too heavy, with insufficient ability to absorb shock and too difficult for customs officials to check. Expanded polystyrene chips, similar to those used for packing electrical equipment, were not readily available in Colombia, and although large sheets of polyurethane foam were available, cutting these to shape proved problematic, and the ability of the material to absorb sufficient shock was questionable.

At this point we sought the advice of one of the foremost Chemistry laboratories in Colombia - the Departamento de Química of the Universidad de Los Andes. The head of the laboratory inspected the fossil and suggested using a rigid, expanded polyurethane foam formed from two liquid components. Polyurethane is a polymer (a plastic) produced when a polyol (an alcohol) reacts with an isocyanate. Polyurethane is not a spontaneously 'foamy' material, but as the chemical reaction is exothermic (heat producing), the energy liberated during the reaction can be used to evaporate a solvent with a low boiling point, which then acts as a 'blowing agent'. By carefully dosing the solvent, and the

Figure 3. Packing UN-DG-R-1000. Left: illustration of the crate showing the fossils (hatched), foam (stippled) and cardboard separators (wavy lines). Right: photographs of three stages of packing; (top): the bones laid out as they are to be placed in the crate; (middle): covered in three layers of bubble wrap; (bottom): the lowermost layer laid in the polyurethane foam.



quantities of the reactants, it is possible to control bubble production and thus both the degree of porosity and the rigidity within the resulting polymer. The result of this reaction, under controlled conditions, can produce a spongy yet rigid material with an open cell structure. Thus, by carefully modifying the relative proportions of the two reactants and the amount of solvent, it is possible to develop a foam with material properties ideal for the purposes we required, which included: a low density, the ability to adapt to the shape of the bones and act as an infilling material, with a high capacity to absorb impacts, and a low curing temperature.

However, in order to ensure the polyurethane foam was completely suitable for our purposes, a series of experiments were undertaken. Different proportions of the two reactants were assessed in order to find the most suitable mixture to protect the bones. The reactants (polyol and isocyanate) were mixed in the following proportions: 1:1, 1:2 and 2:1. A proportion of 1:1 did not generate sufficient heat to evaporate the solvent or produce the desired foamy material; proportions of 1:2, produced a vigorous reaction, but the blowing agent escaped from the foam, and the resulting polymer sagged under its own weight prior to setting, leaving a material with insufficient pore spaces; at 2:1 the foam produced a moderate reaction expanding to approximately five times the original volume of the reactants – ideal for our purposes. Once the desired proportions of reactants were established, the resulting polyurethane foam mixture

was tested on delicate chemistry glass-ware to ensure the foam would not create so much heat, or internal pressure as to damage the bones. The glass-ware was wrapped in the same manner as proposed for the fossil, but in addition the manufacturers of the foam advised coating all items with a layer of very thin plastic sheet to avoid direct contact with the foam. Cutting the resultant foam also indicated good pore dispersal throughout the material, which provided sufficient support and shock absorbency.

The expanded polyurethane foam was perfect. However, completely encasing the bones would have meant that the fossil would not be easily available for inspection by customs authorities. Thus, each crate was lined with a thin plastic sheet and the polyurethane foam poured into the base. Prior to setting, the first layer of bones was gently placed onto the expanding foam. Further polyurethane was generated and broken into large pieces and tightly packed around the fossil. A thick cardboard separator layer was used to cover this first level of bones and foam, and subsequent levels were packed using large pieces of the broken polyurethane foam (Figure 3). To seal the crates, it was originally planned to use plastic or metal straps, but these proved difficult to obtain, and would not have been easy for customs to open. Eventually the crates were simply nailed shut for ease of opening in the airport. However, once checked in Bogotá, the customs tied the crates with 13 mm wide metal security straps that remained in place throughout transit.

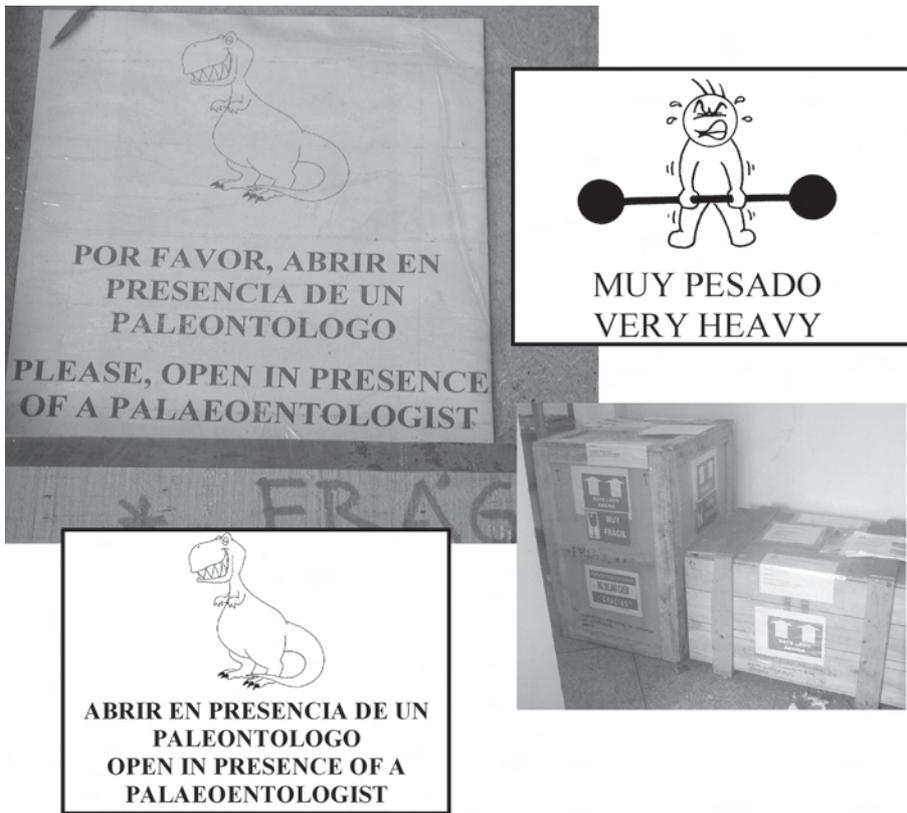


Figure 4. Three examples of the labels used on the crates, and (bottom-right) the packed crates in the Universidad Nacional de Colombia in Bogotá awaiting transport.

Labels

Another aspect of the packaging that required considerable thought was the labelling to be attached to the outside of the crates. There were no labels available from the cargo agency or the University, so our own labels had to be designed and printed. We wanted them to be in both Spanish and English, and needed to give the originating and receiving addresses, the fragile condition of the material, and the orientation (way up) of the crates. The labels needed to be easily identifiable and ideally internationally recognised symbols. In addition, we wanted one of the labels to make it clear that the material was an important fossil, and that a palaeontologist should be present, if possible, should the crates be opened. We decided the most recognisable way to do this was to use an image of a dinosaur (Figure 4). All the labels were created ourselves, printed in colour, and attached to the crates with a complete covering of wide, clear adhesive tape for protection.

The crates could not be finally packed and sealed until all the paper work was completed, and representatives of both the Oficina de Comercio Exterior and Panalpina had inspected the specimens. The Panalpina security representative suggested that the airport police would undoubtedly break open the packaging, and estimated there was a 50% chance that the bones would be broken beyond recognition. Our immediate reaction was not to send the specimen at all, but following advice from various sources

within the Universidad Nacional de Colombia, we decided the recommendation from Panalpina was exaggerated, as other delicate materials had previously been successfully transported. The crates were finally sealed on the 25th November and the fossil remained 'on hold' in the University. We were informed that the likely date of collection was the first week of December, allowing one of us (M.G.) to travel to the UK in order to assist with the unpacking, and to attend the Palaeontological Association (PalAss) annual conference in Leicester in December. With a date for the transport agreed, insurance was arranged through the University of Cambridge.

Transportation

Departure from Bogotá was originally booked for the 9th December, and we were told by Panalpina in Colombia that one of us might need to travel to London airport to oversee incoming customs clearance two days later. However, due to the proximity of Christmas, there was no space available on flights to Europe that day, as perishable goods such as flowers and fruit had priority. The two crates were finally picked up from the Universidad Nacional de Colombia on the 11th December and the fossil was seen through customs (by P.P.) at Bogotá airport immediately after a student viva in the University, and a hurried journey through the capital city's traffic. The two crates, with their valuable consignment were now in the hands of the cargo company awaiting x-ray prior to transit.

Figure 5. Unpacking the Colombian pliosaur in the Sedgwick Museum conservation laboratory whilst the television cameras looked on.



The week following collection of the fossil in Bogotá was frustrating due to further delays and a lack of communication with the cargo company. The London office of Panalpina did not know whether the cargo had travelled or not, and the situation was worse the following week during the PalAss conference. Whilst away from Cambridge, news of arrival the crates was eagerly awaited, and lack of information caused us a great deal of concern. There was uncertainty as to whether it would be necessary to rush down to London for customs clearance at a moments notice (although ultimately it transpired that Panalpina had a customs bonded warehouse rendering this unnecessary). The delays also meant our insurance lapsed and had to be extended. Finally the crates flew on 17th December and were unloaded in Amsterdam! Quite why the shipment went to Amsterdam, and was not booked on a flight direct to London as originally agreed, remains unclear.

Having been unloaded from the aircraft in Amsterdam, the crates were transported to London by lorry. This caused us considerable concern, as the specimen had not been packed with such a long road (and sea) journey in mind. Also the road transport took additional time, so the crates did not arrive in London until the 19th December. By this time Christmas was looming and many of the staff required to receive the crates in Cambridge had commenced their Christmas holidays. Also, the advice of the University Press Office was to wait until the New Year to announce the fossil's arrival, as this is usually a time with little news, and would therefore increase our chances of wide publicity. We discussed the options. The

specimen could have been delivered immediately, but we now had no staff to unload it safely. Alternatively the crates could remain in a Panalpina bonded warehouse over the festive period, and, although we were assured the crates would be safe, we had no idea of the environmental conditions (temperature, relative humidity, etc.) under which they would be stored. After much discussion, and with no other real alternative, we agreed to fix the delivery date to Cambridge for the 6th January 2004.

The arrival

After the Christmas and New Year break it was necessary to confirm with Panalpina that the delivery was still due for the morning of the 6th January 2004, although they were unable to give us a definite time of arrival. We had to arrange with the various Museum staff, technicians, and representatives of the Friends of the Sedgwick Museum, to be available. The press release had the final details added and was circulated by the University Press and Publications Office the day before the planned arrival, using their existing network of contacts. In addition, direct contact was made with the local media to ensure they knew about the story, and this elicited a very enthusiastic response, including a preliminary television interview the evening before the specimen arrived. Preparations were also made to ensure the conservation laboratory was ready and additional items such as the models of the pliosaur were in place. By late in the evening everything was ready for the next day.

- The project was possible and was a complete success;
- Despite being a long-winded and sometimes frustrating process, it is essential to respect all national and international laws and regulations;
- The success of the project lay in the truly collaborative nature of the work, which would not have been possible without the direct involvement of colleagues in both countries, and at all stages of the project;
- Finding and using all existing sources of information and expertise can save considerable time and effort;
- Excellent results are possible by working as part of a creative multidisciplinary team;
- New techniques can be developed using available materials and with suitable research;
- Planning for and managing the media is essential.

A Ph.D. studentship has subsequently been obtained. Work has commenced on the long process of preparing the postcranial skeleton, and the scientific study of the specimen is underway. Now, the hard work really begins.

Acknowledgements

Our thanks go to the many people whose assistance made this project possible. Universidad Nacional de Colombia: Manuel Moreno (Director del Departamento de Geociencias) for agreeing to, and facilitating the loan of UN-DG-R-1000; Alejandro Lozano (Director, Oficina de Comercio Exterior). Universidad de Los Andes: Laboratorio de Análisis Químico, Departamento de Química for advice and materials testing. The University of Cambridge: Ekhard Salje (Head of Department, Earth Sciences); David Norman (Director) and all staff of The Sedgwick Museum; Simon Crowhurst (models); Andrew Pluck (forklift); Karen Dean and Nick Champion (Press and Publications Office). The Friends of the Sedgwick Museum: especially Peter Fuchs and Peter Friend for funding and support. Additionally M.G. thanks Fernando Etayo-Serna and María Páramo for supervision; INGEOMINAS Museo Geológico José Royo y Gómez for preparation facilities; the Universidad EAFIT, Medellín, Colombia for funding; and Carlos Padilla, Director, Fundación Colombiana de Geobiología for support and funding. This paper is dedicated to the memory of Muriel Agnes Arber (1913-2004; Friend 2004), Honorary Life President of the Friends of the Sedgwick Museum who died during preparation of this manuscript. This paper was first presented at the 14th Symposium of Palaeontological Preparators and

Conservators (SPPC) 2005, held at the Natural History Museum, London.

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ERRATA: P.C. Ensom (2006). Figures 12–16 of Paul Ensom’s paper appeared highly pixillated. A replacement set of images is reproduced below. I apologise to Paul and to Steve Donovan (Guest Editor) of the *Trace Fossils in the Museum* thematic set for this problem.

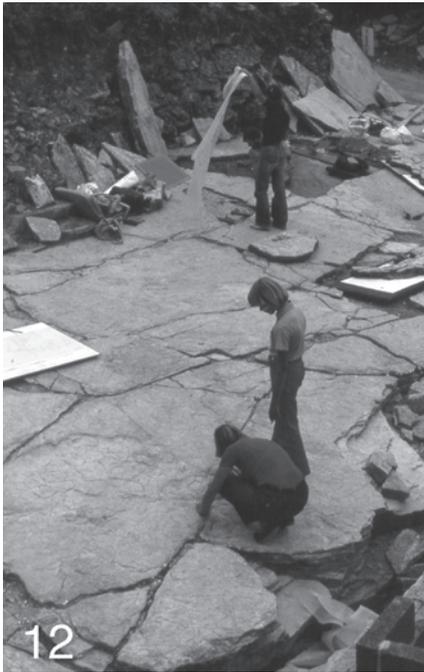


Figure 12. In the foreground, volunteers are marking the blocks and the fractures onto a plan and the pavement at Townsend Road, to allow reassembly.

Figure 13. Sheila Gowers and Rodney Alcock lifting part of the limestone pavement.

Figure 14. Two superimposed tridactyl track casts from the shore at Worbarrow Tout (DORCM G 11374).

Figure 15. Fluorescent tubes throw a wash of light across the reassembled pavement.

Figure 16. A fallen block of limestone with tracks in Durlston Bay, Swanage, Dorset.

Figure 17. Overburden is removed at Sunnydown Farm Quarry, autumn 1986.

GEOLOGICAL CURATORS' GROUP

31st Annual General Meeting

**18th January 2005 at the Hancock Museum,
Newcastle-upon-Tyne**

1. Apologies for absence.

C. Buttler, R. Clements, P. Crowther, S. Howe, R. Gourgey, G. Miller, J. Radley, A. Ross.

2. Acceptance of minutes for the 30th AGM.

Agreed by those present.

3. Matters Arising.

No matters arising.

4. Chairman's report.

Circulated at the meeting. Read by Patrick Wyse Jackson.

This year I spent six months in Carlisle, Pennsylvania, USA, but have been engaging in outreach on behalf of the Group. I attended the Geological Society of America in Denver in November and discussed the possibility of having a session of next years GSA meeting devoted to collections at risk. This was accepted and will take place when the GSA meets in Philadelphia in 2007. While in Denver I was able to solicit some papers for *Geological Curator*.

I expressed concern in *Coprolite* about how to widen membership of the Group. Following e-mails from European members and discussions with Committee it has been decided to try and appoint some Regional representatives who could act as local Treasurers and PRO's in their own regions. They should be asked to identify potential individual and institutional members and recruit them.

GCG is hosting a session at the SPNCH meeting in July 2005, and Giles Miller is thanked for all his work in arranging this on behalf of the Group. We look forward to launching the new State and Status report that Helen Fothergill has been working on.

NatSCA came to Dublin in April 2004 for their AGM and seminar and I was able to welcome them to my home city on behalf of GCG. We remain in close contact with SPNCH through Steve Thompson who is on the GCG committee.

In May 2004 I made a submission to the Museums Association regarding their Collections Project and argued that either the GCG or NatSCA should be

represented on the MA working group, although the MA rejected this.

The Committee met with Phil Manning who told us about the status of geology at Manchester Museum and for this I was grateful.

I wrote to the Chairman of the Royal Cornwall Geological Society concerning the status of the geological holdings at Penzance. I offered the help and advice of the Group. Since then matters have been taken up by Sara Chambers on behalf of the Committee.

I am about to tackle the authors approached to contribute to Guidelines 2. The Geological Society is hoping that the typescript will be submitted in the next 6 months.

The GCG was saddened to learn of the deaths of Muriel Arber, Paul Shilston and Colin Sparrow. To their families and friends I extend the warmest sympathy on behalf of the Group.

I am very grateful to all the members of the Committee who have put up with me for the last three years. I have enjoyed working with you all, and thank you for all your efforts on behalf of the Group.

Report accepted.

5. Secretary's Report.

Circulated at the meeting. Read by the Chairman.

The Committee met four times in 2004, twice at the offices of the Geological Society, once at the Natural History Museum in London, and once at the Yorkshire Museum.

This year we co-opted Dale Johnston onto the Committee as a non-attending member so that he could attend meetings of the Earth Science Education Forum (ESEF) on our behalf. This group has close links with the House of Commons All-Party Parliamentary Group for Earth Sciences and we have submitted a request through ESEF that a future meeting of the All Party group be addressed towards museum collections. I would like to thank Dale for all the hard work he has put in this year corresponding with ESEF.

As Secretary I received approximately 550 GCG related e-mails. It is a testament to the electronic age that we are much more contactable now. Some of the enquiries I posted on the GCG e-mail list or

encouraged others to do so. It is a very easy way of getting information out quickly and 102 people are currently subscribed to it, just under half of our total number of individual members. I encourage all members to join the list if they are on e-mail. The website also provides a good link with both members and prospective members. The large number of queries coming to me via the website is a testament to the work of Camilla Nichol, who has also aided greatly with maintaining the membership database, and along with Ros Gourgey and Sara Chambers helped greatly to ease the burden of collecting subscriptions.

GCG membership summary for 2004.

Category.	Number of members.
UK	
Personal	167
Institutional	71
Overseas	
Personal	22
Institutional	21
New	2
Honorary	12
Cancelled	10
Total	305

I have continued to act as a focal point for all the membership paperwork and Gift Aid documentation in particular. This year I submitted a claim to cover three financial years spanning 2001-2004, for which we received a total of £1245.38 from the Inland Revenue. I would like to encourage all members to fill out a Gift Aid form if they have not already done so.

Toward the end of last year we submitted a grant proposal under the MLA Subject Specialist Networks exploratory grant application round. Many thanks to Helen Fothergill for coordinating the application. The grant would help us to follow up some of the recommendations of the State and Status review of UK Geological collections, which we hope to publish in time for the SPNHC meeting in June 2005.

Report accepted.

6. Treasurer's report.

Report circulated at the meeting.

Hand-over of the GCG accounts to the new Treasurer took place on January 23rd 2004 and thanks should go to Tom Sharpe who, in assuming the role of Acting

Treasurer, undertook a substantial amount of work to bring the accounts into order prior to hand-over.

Reserves have increased by £1362.70, largely as a result of receiving three substantial Gift Aid payments. The Geological Curator's Group has benefited to the tune of £1246.38 (retrospective payments for the years 2001/02, 2202/03 and 2003/04) and we are grateful to all members who are UK taxpayers who have completed Gift Aid forms. Huge thanks are due to Giles Miller for co-ordinating the Gift Aid claims procedure.

Subscription income was £3909.00 (£399.17 down on the previous year). Publication costs have been reduced. Greatest expenditure apart from that relating to publications remains travel cost for members attending Committee meetings.

Grateful thanks are due to Camilla Nichol and Giles Miller who handle the majority of membership and subscription related enquiries and therefore ease the job of the Treasurer. I am also grateful to our Auditors C. Buttler and S Howe for their examination of the accounts.

Report accepted.

7. Programme Secretary's Report.

Circulated at the meeting.

Thanks go to all speakers and organisers of our events over the past year.

Summary of programme 2004.

17-18 May 2004. GCG Seminar and Field Trip: Is Collecting Dead?

North Lincolnshire Museum, Scunthorpe.

June 2004. GCG Training: Trilobites. National Museum of Wales, Cardiff.

Cancelled due to lack of interest. This training session has been re-scheduled for 2005.

21 October 2004. GCG Seminar: Geology in Partnership. National Museum of Wales, Cardiff.

28 Oct - 1Nov 2004. GCG Study Visit: Prague.

9 December 2004. GCG Workshop: Meteorites, Impactites and Tektites. Liverpool Museum.

In addition to the AGM in Newcastle, there is a full programmes of events planned for 2005.

Let Steve McLean know if you have any suggestions for future meetings.

The Chairman thanked Steve McLean for his hard work in organising all of these events.

Report accepted.

8. Journal Editor's report.

Circulated at the meeting. Read by Patrick Wyse Jackson

Two issues of *The Geological Curator* appeared in 2004: Volume 8, Numbers 1 and 2.

I am grateful to those authors who submitted papers, to Mathew Parkes who proofread 8 (1), and Adrienne Foran of Colour Books of Dublin who continue to do an excellent job printing the journal. I thank in particular Maura Morgan of the Department of Geology of Trinity College who packed and mailed Issue 8 (2). I am also most grateful to all those of you who reviewed papers for the journal. Peer review is valuable and allows us to strive towards producing and maintaining a journal of high standards.

I do continue to worry about the lack of copy. I have three papers in hand for the next issue, and although the Committee and I continue to badger speakers at GCG seminars for papers few ever appear in print. Please submit papers.

Report accepted.

9. Newsletter Editor's report.

Circulated at the meeting.

2004 saw the completion of the 15th year of publication of *Coprolite*, even though it was originally planned as an interim publication. Three issues (Numbers 43, 44 and 45) were published totalling 40 pages. The number of pages was fewer than in previous years, partly explained by only two short meeting reports being published this year, but mainly in an attempt to reduce our expenditure on the newsletter. Printing and distribution of *Coprolite* in 2004 cost £1348.00, compared with £1741.00 in 2003 and £1664.00 in 2002.

Remember that *Coprolite* is your newsletter, for you to tell everyone else what you've been up to. Any news of events, meetings, exhibitions, new acquisitions, publications, staff changes and job moves, or anything at all related to geology in museums would be more than welcome.

Thanks are due to Barnes Print Group of Nottingham who print and distribute *Coprolite*, and to Clinton Burhouse of Burhouse Ltd of Huddersfield for his continuing generous support.

Report accepted.

10. Recorder's report.

Circulated at the meeting.

Helen Fothergill has continued the work of the new "State and Status" report started by Glenys Wass. The number of questionnaires returned numbered 248, and all the data has now been entered on to an Access database. Some analysis has begun, but no comparisons have yet been drawn with the original Doughty Report. However a number of general impressions can be gained already:

- Many museums holding nationally important collections have few, if any, specialist curatorial staff.
- Very few museums have benefited from grants to work directly with the collections within the last 10 years.
- Resources (time and money) are felt to be the biggest threats to the collections in the future.
- Taking average numbers from the ranges described in the survey, national collections stand in the region of 6 million specimens. However, as a number of significant institutions failed to return the surveys, and no "top estimate" was asked for from the larger institutions this would be expected to be dramatically higher.
- Many collections are not being actively added to.
- Taking average numbers, approximately 60,000 specimens were added to museum collections throughout the UK in the last year, implying an increase in size by just over 1%. This does not take into account collections relocated from institutions that have closed during that period. These may be listed as increases for individual museums, but the total size of the geological communities collections would be unaffected.
- One unfortunate impression gained from the "condition" questions is that where no specialist curators are employed the collections are in a "good" state, and where specialists are employed the collections are generally in a worse state (due to specialists being aware of the problems associated with collections?).

Apologies for the delay to the expected delivery of the 2001 State and Status Report. Difficulties arose at the collation stage, principally due to the lack of response mentioned above. However, we are now in a position to draw reasonable conclusions from the accumulated data and make comparisons to the Doughty Report of 1981. Full publication is planned for April 2005.

Report accepted.

The Chairman noted that this will be a very valuable publication, and that it needs a wide distribution so that people are made aware of the issues raised by the report.

Points raised:

Hugh Torrens noted that few geological collections have benefited from funding compared to art collections. Would it be possible for GCG to set up a fund or donation scheme to help address this imbalance, perhaps to encourage publication work?

Steve Thompson replied that some of this work could be done through regional networks.

Helen Fothergill noted that case histories of rescued collections would be a good topic to cover, as this would highlight some of the work done to safeguard collections.

11. Election of Officers and Committee for 2005.

All current Officers and co-opted members, with the exception of the Chairman whose term on Committee ends with this AGM, have agreed to continue for another year.

Amanda Edwards has agreed to take over the Chairman's post. No other nominations have been received.

Agreed by the meeting.

12. Election of Auditors.

Still in discussion. Members will be informed in due course.

13. Any other business.

a. Steve Thompson. Due to recent grant applications for the Subject Specialist Networks, the MA and MLA are now more aware of the work of GCG.

b. The incoming Chairman thanked Patrick Wyse Jackson for all his work as Chairman. She then introduced herself to the Group, in particular to those who may not know her. She has previously been GCG Secretary. Please do not hesitate to get in touch if there are any issues you think should be raised by GCG.

14. Date and venue of next meeting.

5th December 2005. University College Worcester.

Meeting ended at 17.25.

Annual Accounts for the period 11th November 2003 to 21st December 2004

	2004	2003		2004	2003
<i>Income</i>			<i>Expenditure</i>		
Subscriptions ¹	3909.00	4308.17	<i>The Geological Curator</i> ²	1229.57	3011.75
Seminar and workshop fees	417.50	658.00	<i>Coprolite</i>	1348.00	1741.00
Gift Aid ³	1246.38		Seminars and workshops	428.15	245.26
Donations	5.00		Committee expenses	718.19	690.00
Interest ⁵	--	84.69	Website domain name	10.58	
C. Burhouse sponsorship	--	500.00	Brighton Medal engraving	14.50	
	<u>£5577.88</u>		Refund of overpaid subs ⁴	432.00	
Balance on 10.11.03	<u>£6999.57</u>		Bank charges (Euro conversion)	34.19	
				£4215.18	
			Balance on 21.12.04	<u>£8362.27</u>	
				<u>£12577.45</u>	
	12883.36				

Notes

¹ Includes £120.00 overpaid subs, £10 subs '02; £117.77 subs '03; £51 subs '05

² Excludes £973.65 credit carried over from 2003; this brings the true cost for the publication of *The Geological Curator* to £2203.22

³ Breaks down: £251.56 (2001/2); £424.71 (2002/3); £570.11 (2003/4)

⁴ Includes refund of overpayments made in 2003 and 2004

⁵ Interest is no longer payable on charitable society/club accounts as of Oct '03

S. Chambers *GCG Treasurer*

C.J. Buttler and C. Howells *Auditors*

21st December 2004

PRESENTATION OF THE A.G. BRIGHTON MEDAL TO HUGH S. TORRENS



Address by Patrick Wyse Jackson, Chairman of the GCG at the GCG AGM, Hancock Museum, 18th January 2005

While serving as Chairman of the GCG has been enormously enjoyable for most of the three-year period, there are two events that make it even more so, and both take place today. The first, but not in any particular order, will occur later today when I hand over the reigns to my successor. The second is the awarding of the Brighton Medal, and I am delighted that we have the medallist here today.

The Brighton Medal was established in 1992, and is usually awarded every three years at a time that coincides with the end of a Chairman's period of office. The regulations as published indicate that this medal is awarded to those who have "devoted a significant part of their working lives to the actual care of geological specimens, or who have introduced innovations which have led to significant improvements in the care of geological specimens or who, through their example or by teaching (including

writing), have inspired others to the better care of geological specimens. It might also be awarded to those who have fostered an increased awareness of the value of geological collections, e.g. through collections research." (see *The Geological Curator* 5(8) [1994], pp. 331-332.

This year's medallist is Hugh Simon Torrens. I think that you will agree that Hugh is a most worthy recipient on account of his work on collections research.

Hugh spent his youth on the south coast where his father (a graduate of Trinity College, Dublin) practiced as a dentist and later pioneered facial reconstruction; his mother was a librarian, and so Hugh was instilled from an early age with a love of books. His interest in geology was aroused at the age of eleven when he found a chalk echinoid at Wick, Hampshire, and was fostered at school by a retired cleric. An ammonite find four years later bamboozled the great W.J. Arkell who believed that the unit from which the fossil was claimed to have come was barren. Hugh proved

otherwise and received a gracious apology. He went to Oxford and then to Leicester where he studied under Peter Sylvester-Bradley gaining his Ph.D. in 1966 while working on a Post-Doc. on Sicilian Mesozoic limestones begun the previous year.

In 1967 he was appointed a lecturer at Keele and spent all his academic career there with the exception of a number of sabbatical periods abroad.

His interest in the history of geology and technology dates from his student days, and was probably sparked by the bug of book collecting. I have not seen Hugh's library but can imagine what treasures it holds.

Hugh is a past President of the British Society for the History of Science, of INHIGEO, and served on the Council of the Society for the History of Natural History. He has received several awards for his work in the history of geology.

I must admit that after Hugh was named in *Coprolite* as the Brighton Medallist I met someone who questioned the choice—after all Hugh has not curated many specimens in his career. True, but his work towards the advancement and promotion of geology in museums far outweigh his lack of specimen curation. Hugh has served the Geological Curators' Group as a member of the original committee in 1974, and as Chairman in 1977-1980, and he edited an issue of the journal in 1980. With Brian Page he established the *Newsletter* (now *The Geological Curator*); in fact he authored the first paper published by the GCG—that on Lichfield Museum. Anyone who wishes to quantify his contribution to museum geology can examine the Lost and Found columns as well as his numerous articles published in our journal. The former contain information that he has ferreted out on the most obscure of individuals, their lives and most importantly their collections. Hugh has shown that Collections Research to be an essential component of museum work, and I believe that this is probably his most important contribution to museum geology.

He is a walking encyclopaedia on geologists and their collections. I recently looked up the entry for Thomas Weaver in the recently published *Oxford Dictionary of National Biography* and there towards the end of the article was written:

“Prior to his death he had given many fossils and minerals to the Geological Society and the Yorkshire Philosophical Society. What remained of his large collection was sold at auction that month; the unsold residue is reported to have formed the hard core for a urinal at Bewdley, Worcestershire.”

Then and only then did I realize that only Hugh Torrens could have written the article. Hugh also contributed over 40 biographies to the *Dictionary*.

Hugh is refreshing in that when he sees a cause, injustice or simply bad practice he is willing to stick his neck out and say what needs to be said. He will lambaste museums and libraries for their treatment of their holdings and I know was deeply unhappy with the sale of the Turner Collection of rare books by his own institution as well as the disposal of collections from other libraries and museums. These libraries and museums need to be seen as a resource for research and not simply as a source of funds to be diverted into trendy hip research fields.

Another facet of his character is that he is willing to give of his time to help others in their research, whereas others might be more selfish in this respect. Recently while in America I was writing about Grenville Cole, a diminutive tricycling geologist and recalled from the chaotic filing cabinet that is my brain that S.S. Buckman was a fanatical cyclist. Following a quick note to Hugh he sent me his recent paper on Buckman that filled in gaps in my knowledge, and I helped improve my own article. Hugh's name is frequently found named in the acknowledgements of papers published on the history of British geology. He is also a frequent lecturer on historical and technological topics and in doing so has done much to promote geology in museums.

Hugh, in appreciation for all your work for the GCG and for your tireless promotion of the history of geology and in particular your championing of collections research I am delighted to award you the Brighton Medal of the Geological Curators' Group.

Acknowledgement

For this citation I have drawn extensively on a published interview with Hugh by Richard Howarth published in the *Newsletter of the International Commission on the History of Geological Sciences* **33** (2001), 34–37.

The previous recipients of the A.G. Brighton Medal:

1992: Edith Brighton & the late David Price

1992: Charles Waterston

1995: Bob King

1998: Roy Clements

2001: Philip Powell

GEOLOGICAL CURATORS' GROUP

32nd Annual General Meeting

9th December at the University of Worcester, 5th December 2005

1. Apologies for absence

Patrick Wyse Jackson, Helen Fothergill, Camilla Nichol, Steve Howe, Steve Tunnicliffe.

2. Acceptance of Minutes of the 31st Annual General Meeting held at the Hancock Museum

Agreed, with the following amendments:

Chairman's Report. Paragraph 4. Amend SPNHC to NatSCA.

3. Matters arising.

None.

4. Chairman's Report.

Circulated.

In 2005 GCG published "*The State and Status of geological Collections in UK Museums: 2001*" as *Geological Curator* Volume 8 No3. The report contains a snapshot of information relating to; the size and nature of geological collections, staffing levels, documentation, storage, environmental conditions, condition of collections and services provided. This is a valuable resource to draw upon, to support our everyday work and our championing of geological collections. In 2006 the aim of the group will be to take the findings of this report and to publicise them to a wider audience.

This year GCG has been in contact with a number of institutions concerning the wellbeing of their collections; the Department of geology at the University of Leicester, the Geological Museum of Lisbon and the Fersman Museum in St Petersburg.

GCG Study Tours are still seen as a good way to learn about the range of material that geological collections contain. In 2006 GCG have decided to concentrate on UK collections and our first study trip will take place in October, jointly visiting the collections at Liverpool and Manchester. May I urge as many members as possible to attend?

The relaunch of the GCG web pages is seen as a priority for the coming year. The appearance and

content will be improved. Camilla Nichol and Dave Gelsthorpe will be involved in this.

Publications remain important to the group, and we should thank Patrick Wyse Jackson for his continued expertise in editing *The Geological Curator*. I would like to encourage everyone to think of material they may wish to include in future issues of the journal.

The abstracts of the June meeting of SPNHC are available free from Giles Miller at the NHM.

Back copies of *The Geological Curator* are housed in the Manchester Museum. All issues are available for purchase.

I would like to thank the following people who will be standing down from their positions on committee:

Giles Miller who has served as Secretary for three years.

Sara Chambers who has served as Treasurer for two years, despite the challenges of travelling from Cornwall.

Our thanks go to Andrew Ross who has completed his term on Committee, and to Phil Doughty who has been our representative on the BGS Collections Advisory Committee.

Report accepted.

5. Secretary's Report.

Circulated.

Much of this year's correspondence seems to relate to missing copies of *Geological Curator* or *Coprolite*, duplicated standing orders and requests to disseminate information regarding curatorial matters. Many of the latter have been forwarded via the GCG list server. I would like to make my annual plea for members to join and contribute to the e-mail list server. Details of how to join are available on the GCG website.

I would like to thank Dale Johnson who is co-opted to represent GCG at the Earth Science Educational Forum (ESEF). It is a good idea for GCG to continue to be involved with this group as they have a great deal of lobbying power, and have good links with the All Party Parliamentary Group on Earth Sciences at the House of Commons. We should look in the future to hold a collections related session of this group and to contribute to the annual meeting of ESEF.

Most work this year has been centred on the Society for the Preservation of Natural History Collections (SPNHC) annual conference. This was held at the Natural History Museum in July 2005. Over 200 delegates attended. The first day of the conference included a day trip to the Oxford University Museum of Natural History that was organised by me, with the Oxford arrangements handled by Paul Jeffery. As part of the main conference we also had a half day session dedicated to Geological talks. Six speakers took part, including two members of Committee. I would like to thank Helen Fothergill and Patrick Wyse Jackson for getting the State and Status report ready for release at the meeting and for presenting talks.

I am editing the conference volume, which will include four geological papers. All GCG members that attended will receive a copy of this volume. Abstracts are also available.

Report accepted.

6. Treasurer's report.

Circulated, with accounts summary.

GCG reserves have decreased by £1467.67. This is partly attributable to a slight increase in subscriptions, outstanding income due from workshops and an increase in expenditure on publication of *Geological Curator* and *Coprolite*.

Additional incomes from the SPNHC meeting and Gift Aid have not yet been received and so do not show in the current accounts.

Our greatest expenditure apart from publications remains Committee expenses. There is a small decrease on last year, which is unlikely to continue as fewer "parent" institutions remain willing or are unable to financially support attendance at committee meetings.

Grateful thanks are due to Camilla Nichol and Giles Miller who handle the majority of membership and subscription related enquiries and so ease my job considerably. I am also grateful to our auditors Caroline Buttler and Cindy Howells for their examination of the accounts.

Questions from the floor.

Tom Sharpe asked about the level of Gift Aid expected for 2005.

The accounts figure of £1246.38 is for three years, so it is around £400 for the year. This has not yet been claimed.

Tom Sharpe commented that even with this included (Gift Aid) the current reserves will be the lowest for a number of years. GCG should look to recoup some income by selling back-issues of publications, but also think about raising subscriptions and trying to attract new members.

Giles Miller queried the figure of £127.50 for SPNHC sponsorship. This may increase due to expenses claims.

Report agreed.

7. Programme Secretary's Report.

Circulated.

Summary of programme for 2005.

18 -19 January 2005. GCG seminar, 31st AGM and field trip. Planning for disaster, rescue and specimen relocation.

Hancock Museum, Newcastle-upon-Tyne.

7 October 2005. GCG training workshop: Gemstone identification for Natural Science Curators.

Hancock Museum, Newcastle-upon-Tyne.

28 April 2005. GCG workshop: Identifying fossils 5, Trilobites. National Museum of Wales, Cardiff. Cancelled.

16 June 2005. SPNHC conference: Realizing standards. Natural History Museum, London.

Conference hosted by the NHM, in conjunction with The Natural Sciences Collections Association, The Geological Curators; Group and ICOM-CC Working Group Natural History Collections.

October/November 2005. Overseas Study visit: Geological Museum, Copenhagen. Cancelled due to lack of bookings.

Forthcoming programme 2006.

26 April 2006. GCG workshop: The Curation and Conservation of Rock Collections.

National Museum of Wales, Cardiff.

18 - 19 May 2006. GCG seminar and field trip: Dangerous Collections. The Manchester Museum.

11 October 2006. GCG workshop: Geological Archives. World Museum Liverpool.

4-5 December 2006. GCG Seminar and 33rd AGM: Learning with Geology Collections. Plymouth City Museum and Art Gallery.

UK Study Visit - details and date to be confirmed.

There have been some attendance problems. Meetings have been well attended, but workshops have not. Committee have agreed to publicise our programme more widely to other groups in an attempt to boost numbers. We are considering replacing the overseas study trip with one to a UK national museum. We will evaluate the success of this venture at a later date.

I would like to thank all the local organisers, speakers and workshop leaders for all their hard work.

As ever, please contact me if you have any ideas for seminar or workshop topics.

Report accepted.

8. Journal Editor's Report.

Circulated.

Two issues of *The Geological Curator* were/or will be published in 2005.

Volume 8(3) is devoted entirely to the report "*The State and Status of Geological Collections in United Kingdom Museums: 2001*".

Volume 8(4) should be printed in the next ten days and contains several papers as well as a Lost and Found item, a book review and the minutes of the 30th AGM.

I am grateful to Vincent Fitzpatrick and Adrienne Foran of ColourBooks of Dublin who continue to do a professional job of printing *The Geological Curator*. I would also like to thank Matthew Parkes, my colleagues on the GCG Committee and in Trinity College for their continuing support.

Mandy Edwards thanked Patrick on behalf of GCG for his continuing work in editing *The Geological Curator*.

Report accepted.

9. Newsletter Editor's Report.

Circulated.

2005 saw completion of the 16th year of publication of *Coprolite*. Three issues were published (Numbers 46, 47 and 48), in March, June and November.

Some copies posted to members have not been received. I apologise if this has happened to you, and if you are missing any copies let me know. We hope that the problem has been resolved.

For *Coprolite* to fulfil its roles as a newsletter, it needs news. Any news of events, meetings, exhibitions, new acquisitions, publications, staff

changes, or anything related to geology in museums would be very welcome.

Thanks are due to Barnes Print group in Nottingham who print and distribute Coprolite.

Report accepted.

10. Recorder's Report.

State and Status Report: 2001 is now published and has been circulated to GCG subscribers. A huge vote of thanks to Patrick Wyse Jackson for the arduous task of reading and formatting the document to go to print.

The abstract was been submitted to the SPNHC committee for the conference at the NHM in June 2005 and a short presentation given about the report, its scope and its findings.

Thank you to all those who have given feedback (positive or otherwise!); without knowing what was done well or poorly, it is difficult to see a way of moving forward.

During the writing-up stage I began to realize that a number of small museums in the South West were not included; presumably others across the UK were similarly missed. Whether they were originally contacted or failed to respond is unknown. However, during the time when reminders were sent out, they were certainly missed by me. This would not particularly skew the results, but if future surveys are to be carried out, we do need to develop an up-datable database for museums holding geology.

I must also point out that the recommendations at the end of the report are all my own and may not be supported by GCG as an organization.

The report will now be circulated to a wider museum community and further work is underway to develop and implement some of the recommendations.

With the work Camilla *et al* are undertaking with the web site, we plan to maintain a list of museum holding geological collections in the UK, with appropriate links to their websites.

Discussions have already started regarding the options available for the development of an online 'specialism' database, to enable curators to make contact with researchers working in a specific field, and for researchers to contact museums that may hold material of interest to them. The intention is that these 'specialists' may be willing to visit museums for free/for expenses/for a fee and work directly with the curators on a small part of the collection. For example a researcher/museum curator with expertise in the

identification of Mesozoic echinoderms may only take one day to work their way through one museum's entire collection, but that would mean that the researcher encounters material they might otherwise never see and equally the museum can fully catalogue those specific specimens with confidence.

Debate about this is welcome.

Report accepted.

11. Election of Officers and Committee.

The following nominations for Officers and Committee have been received:

Nomination for Committee - Mike Howe, British Geological Survey.

Nomination for post of Secretary - Matthew Parkes, Geological Survey of Ireland. Proposed by Giles Miller, seconded by Tom Sharpe.

Nomination for post of Treasurer - Helen Kerbey, National Museum Wales. Proposed by Sara Chambers, seconded by Steve McLean.

All elected by those present.

12. Election of Auditors.

Current auditors are C. J. Buttler and C. Howells. As there has been a change of post holder it was suggested that the new Treasurer may wish to find other candidates. Treasurer will report any change to Committee at the next ordinary Committee meeting.

13. Any other business.

No matters raised.

14. Date and Venue of next AGM.

Plymouth City Museum and Art Gallery. Monday 4th December 2006.

Meeting ended 17.15.

Annual Accounts for the period 21st December 2004 to 28th November 2005

	2005	2004		2005	2004
<i>Income</i>			<i>Expenditure</i>		
Subscriptions ¹	3504.59	4308.17	<i>The Geological Curator</i>	2671.36	2203.22
Seminar and workshop fees	140.00	417.50	<i>Coprolite</i>	1558.00	1348.00
Gift Aid ³	--	1246.38	Seminars and workshops ⁴	157.50	428.15
Donations	12.00		Committee expenses	534.35	718.19
Geological Curator back issues	11.00		SPNHC Sponsorship	127.50	
	<u>3667.59</u>		Refund of overpaid subs ⁵	42.00	
Balance on 21.12.04	<u>8362.27</u>		Bank charges (Euro conversion)	44.55	
				<u>5135.26</u>	
			Balance on 28.11.05	<u>6894.60</u>	
	12029.86			<u>12029.86</u>	

Notes

¹ Includes: £120 overpaid subscriptions yet to be refunded, £30 subs '03; £56 subs '04; £62 subs '06

² Excludes SPNHC refund of £1000.00 due early 2006 and outstanding income from Gem workshop (October)

³ Gift Aid payment for 2004/5 not yet received

⁴ Expenditure from Gem workshop (October)

⁵ Represents partial refund of overpayments made in 2005



The Geological Curators' Group

2007 MEMBERSHIP RENEWAL/APPLICATION FORM

Please complete this form (or a photocopy of it) and return it with payment to:

John Nudds, Department of Earth Sciences, University of Manchester,
Oxford Road, Manchester M13 9PL, U.K. (e-mail: john.nudds@manchester.ac.uk)

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Please make all cheques and postal orders payable to the "Geological Curators' Group". US subscribers may remit in US \$. Other overseas subscribers are asked to make their payment in Sterling.

UK subscribers are reminded that subscriptions to *The Geological Curator* are tax deductible.

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Tel:	Fax:
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Position:	
Organisation and address if different from above:	
Where did you hear about us?	

If you do not wish your details to be included in this year's membership list, please tick here

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